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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

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Original Patent No.: 6,357,970

Reissue Application No.: 10/799,492

Filing Date: March 12, 2004

For: **COMPRESSIBLE WELDED WIRE
WALL FOR RETAINING
EARTHEN FORMATIONS**

Group Art Unit: 3673 (In Original Case)

Examiner: A. Pechhold (In Original Case)

Present Examiner: Meredith Petravick

**SECOND SUPPLEMENTAL
PRELIMINARY AMENDMENT**CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being sent
via facsimile to: Examiner Meredith Petravick, at facsimile No.
571-272-8300 on August 28, 2006.

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This Amendment is supplemental to that filed May 22, 2006.

Amendments to the Claims:

1. (Original) A soil reinforced retaining wall for an earthen formation,
comprising:

- a) a plurality of welded wire soil reinforcing mats
successively embedded in the formation one above the
other in generally horizontal spaced relationship, each mat
having a generally horizontal floor comprised of a gridwork
of wires and a face comprised of generally vertically
extending wires wherein the wires of the face of each mat
are held against horizontal displacement by the reinforcing

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mat thereabove and are free to move vertically relative thereto; and,

- b) a welded wire backing mat disposed behind the vertically extending wires of the face of each reinforcing mat for movement relative thereto in a generally vertical plane, each backing mat having an element for supporting engagement with the next successive reinforcing mat thereabove and being spaced from the floor of the reinforcing mat therefor to permit the next successive reinforcing mat to settle to accommodate settling of the earthen formation.

2. (Original) A soil reinforced retaining wall according to Claim 1 wherein the vertically extending wires of the face of each reinforcing mat are held against horizontal displacement by engagement with a cross-wire of the next successive mat thereabove.

3. (Original) A soil reinforced retaining wall according to Claim 1 further comprising a connector between the face of each soil reinforcing mat and the backing mat therebehind to provide limited restraint to the backing mat against vertical movement relative to the face.

4. (Original) A soil reinforced mat according to Claim 3 wherein the connector comprises a one or more hog-rings connected between the backing mat and the face of the reinforcing mat.

5. (Original) A soil reinforced retaining wall according to Claim 4 wherein:

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- a) the face of each reinforcing mat has a wire extending transversely of the vertically extending wires of the mat; and,
- b) the hog rings are connected between the backing mat and the transversely extending wire.

6. (Original) A soil reinforced retaining wall according to Claim 1 wherein the generally vertically extending wires of the face of each reinforcing mat have distal ends which extend through the next successive reinforcing mat thereabove to restrain the backing mat behind said next successive reinforcing mat against horizontal displacement.

7. (Original) A soil reinforced retaining wall according to Claim 1 wherein the backing mats have vertically extending wires with free distal ends which extend through the next successive reinforcing mat thereabove to restrain the backing mat behind said next successive reinforcing mat against horizontal displacement.

8. (Original) A soil reinforced retaining wall according to Claim 1 wherein a welded wire stiffener mat is disposed over a lowermost soil reinforcing mat, said stiffener mat having a turned-up distal end to restrain the backing mat disposed behind the face of said lowermost reinforcing mat against horizontal displacement.

9. (Original) A method of constructing a soil reinforced retaining wall for an earthen formation, comprising:

- a) embedding a plurality of welded wire soil reinforcing mats in the formation in generally horizontal spaced relationship to one another so that each mat has a generally horizontal

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floor comprised of a gridwork of wires and a face comprised of generally vertically extending wires wherein the wires of the face of each reinforcing mat are held against horizontal displacement by the mat thereabove and are free to move vertically relative thereto; and,

- b) positioning a welded wire backing mat behind the vertically extending wires of the face of each reinforcing mat for movement relative thereto in a generally vertical plane, each backing mat being disposed for supporting engagement with the next successive reinforcing mat thereabove and being spaced from the floor of the reinforcing mat therefor to permit the next successive reinforcing mat to settle to accommodate settling of the earthen formation.

10. (Original) A method according to Claim 9 wherein the vertically extending wires of the face of each reinforcing mat are held against horizontal displacement by engagement with a cross-wire the next successive mat thereabove.

11. (Original) A method according to Claim 9 further comprising connecting the face of each soil reinforcing mat and the backing mat therebehind to provide limited restraint to the backing mat against vertical movement relative to the face.

12. (Original) A method according to Claim 11 wherein the step of connecting is provided by one or more hog-rings connected between the backing mat and the face of the reinforcing mat.

13. (Original) A method according to Claim 12 wherein:

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- a) the face of each reinforcing mat has a wire extending transversely of the vertically extending wires of the mat; and,
- b) the hog rings are connected between the backing mat and the transversely extending wire.

14. (Original) A method according to Claim 9 further comprising extending the vertically extending wires of the face of each soil reinforcing mat to provide distal ends which extend through the next successive reinforcing mat thereabove to restrain the backing mat behind said next successive reinforcing mat against horizontal displacement.

15. (Original) A method according to Claim 9 further comprising providing vertically extending wires on the backing mat with free distal ends which extend through the next successive reinforcing mat thereabove to restrain the backing mat behind said next successive reinforcing mat against horizontal displacement.

16. (Original) A method according to Claim 9 further comprising positioning a welded wire stiffener mat over a lowermost soil reinforcing mat to restrain the backing mat disposed behind the face of said lowermost reinforcing mat against horizontal displacement.

17. (Previously Amended) A soil reinforced retaining wall for an earthen formation, comprising:

- a) first and second welded wire soil reinforcing mats embedded in the formation in generally horizontal [horizontally] spaced relationship with the second mat being disposed above the first mat and the first mat having

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a face extending upwardly from one end thereof toward the second mat; and,

- b) support means carried by the face of the first mat and disposed for supporting engagement with the second mat, said means being movable relative to the face to permit the second mat to move vertically relative to the first mat to accommodate settling of the earthen formation without bulging of the face.

18. (Original) A soil reinforced retaining wall according to Claim 17 wherein the face has one said facing the earthen formation and the support means comprises a welded wire backing mat for said face to the side thereof facing the formation.

19. (Original) A soil reinforced retaining wall according to Claim 18 wherein the backing mat is releasably secured to the face.

20. (Previously Amended) A soil reinforced retaining wall for an earthen formation, comprising:

- a) first and second welded wire soil reinforcing mats embedded in the formation in generally horizontal spaced relationship with the second mat being disposed above the first mat and the first mat having a face extending upwardly from one end thereof toward the second mat; and,
- b) support means carried by the face of the first mat and disposed for supporting engagement with the second mat, said means permitting the second mat to move vertically relative to the first mat to accommodate settling of the earthen formation without bulging of the face.

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21. (Previously Amended) A soil reinforced retaining wall for an earthen formation comprising:

- a) first and second welded wire soil reinforcing mats embedded in the formation in generally horizontal spaced relationship, with the second mat being disposed above the first mat;
- b) a face secured to and extending upwardly from one end of the first mat and toward the second mat; and,
- c) support means carried by the face and disposed for supporting engagement with the second mat, said means being movable to permit the second mat to move vertically relative to the first mat to accommodate settling of the earthen formation without bulging of the face.

22. (Previously Amended) A soil reinforced retaining wall for an earthen formation comprising:

- a) first and second welded wire soil reinforcing mats embedded in the formation in generally horizontal spaced relationship, with the second mat being disposed above the first mat;
- b) a face secured to and extending upwardly from one end of the first mat and toward the second mat; and,
- c) support means carried by the face and disposed for supporting engagement with the second mat, said means permitting the second mat to move vertically relative to the first mat to accommodate settling of the earthen formation without bulging of the face.

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